

Sovereign Wealth Funds

Global Financial Environment

Latin American Pensions Conference

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April 2008

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Global Financial Environment

Emerging Markets to Global Center Stage

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Global Financial Environment

The growth rate of EM countries averaged $6\frac{1}{2}$ percent; That of advanced countries was $2\frac{3}{4}$ percent

Inflation of 5 percent in the EM countries approached convergence with that of industrial countries

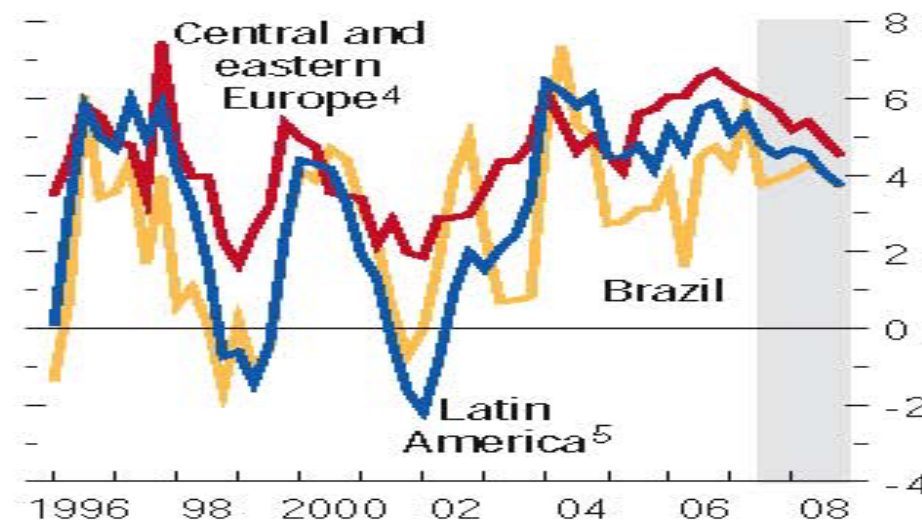
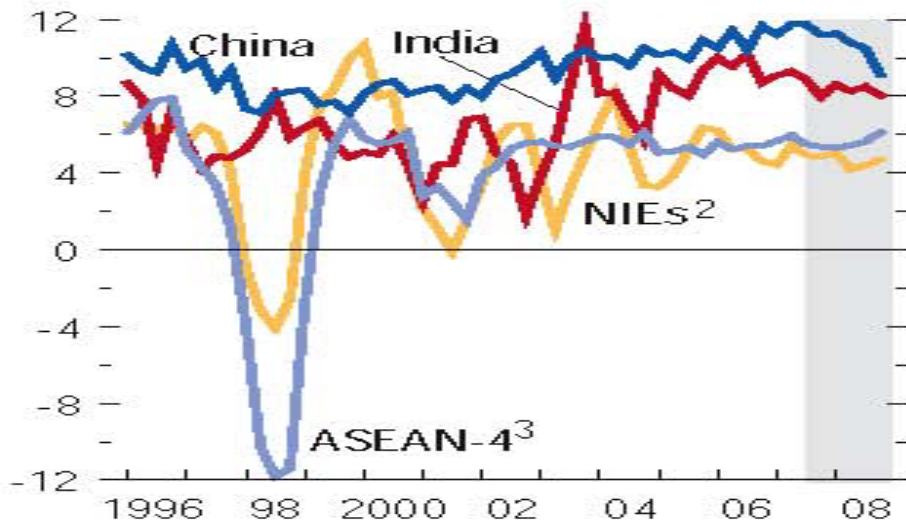
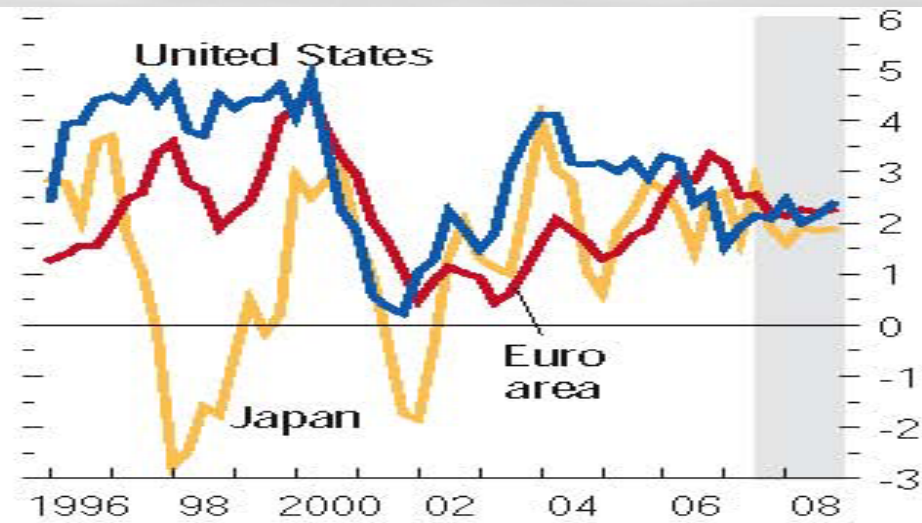
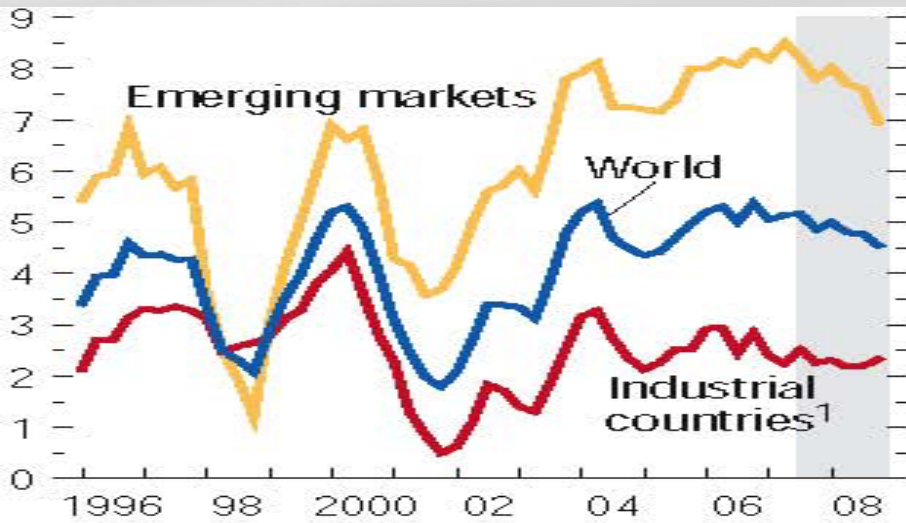
Mature economies net savings: negative $1\frac{1}{4}$ percent of GDP;
EM countries net savings: positive $4\frac{1}{2}$ percent

EM and mature economy current account balances mirrored net savings balance

➤ China, oil-producing countries and the United States

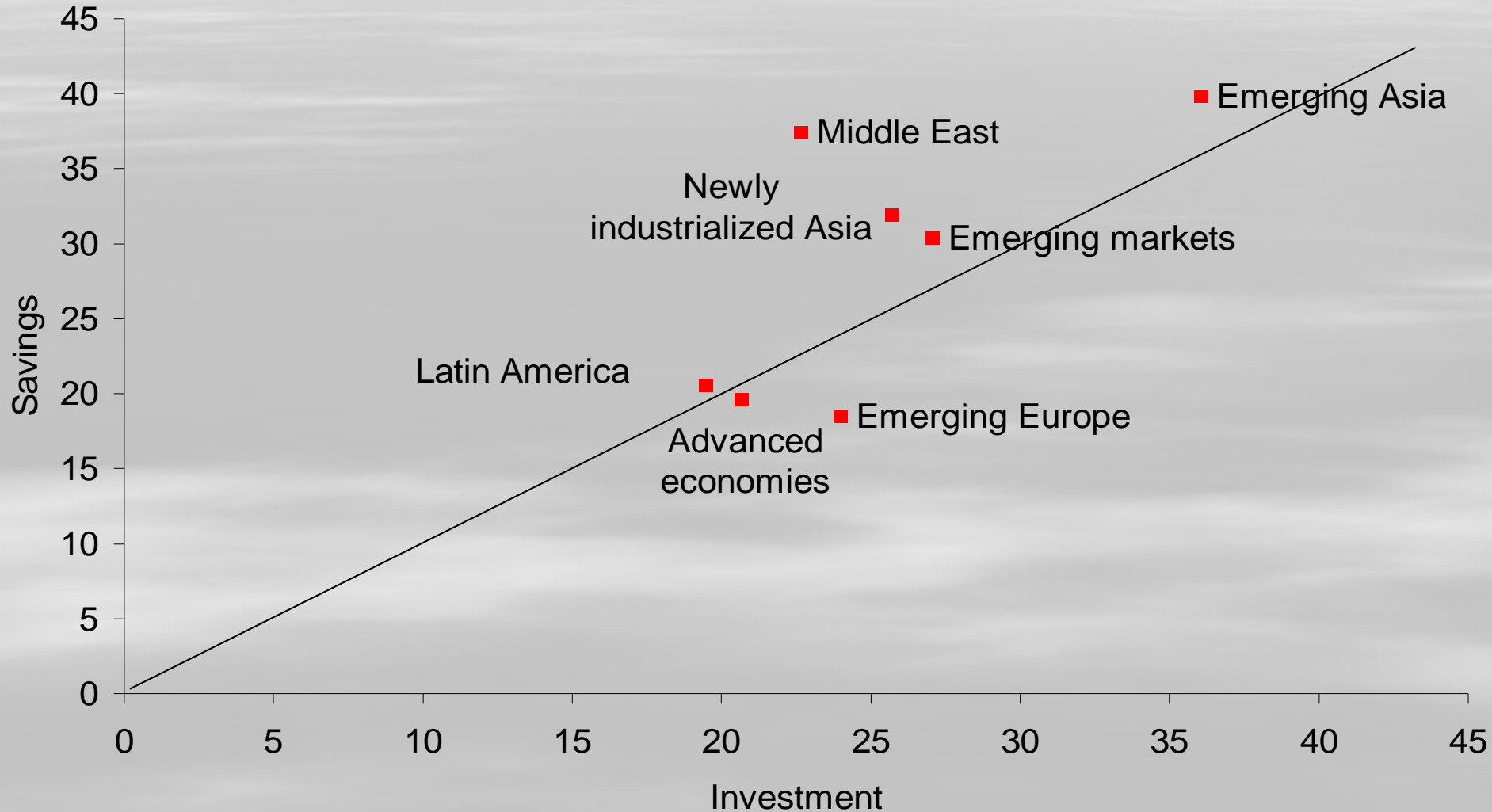
EM growth has outpaced that of the Industrial countries

WEO: (Real GDP; percent change from a year ago)



EM countries were significant net savers in 2003-06

Average Savings and Investment Balances, 2003-2006
(In percent of GDP)

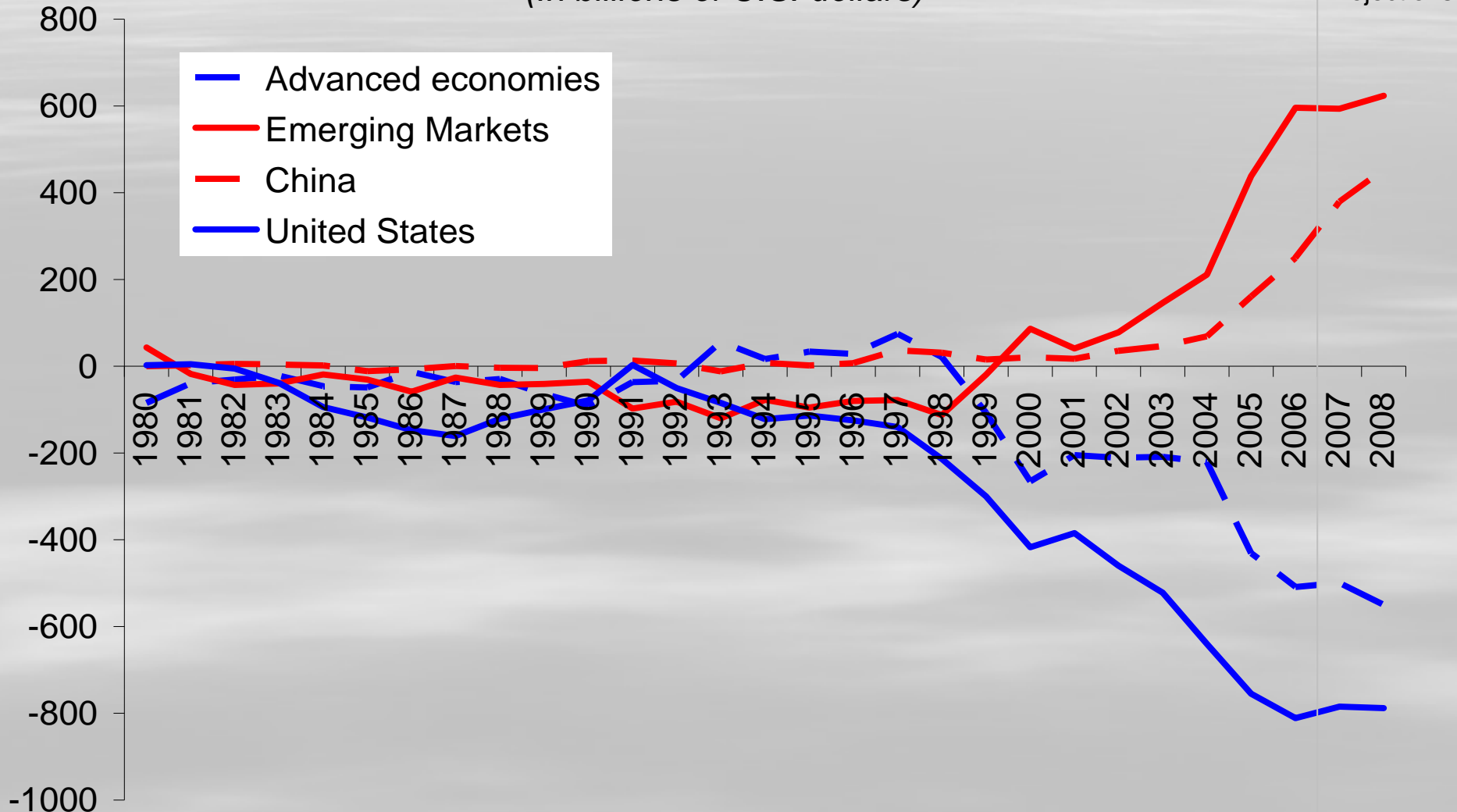


Source: IMF, WEO

Net savings performance has driven external current account balances

Current Account

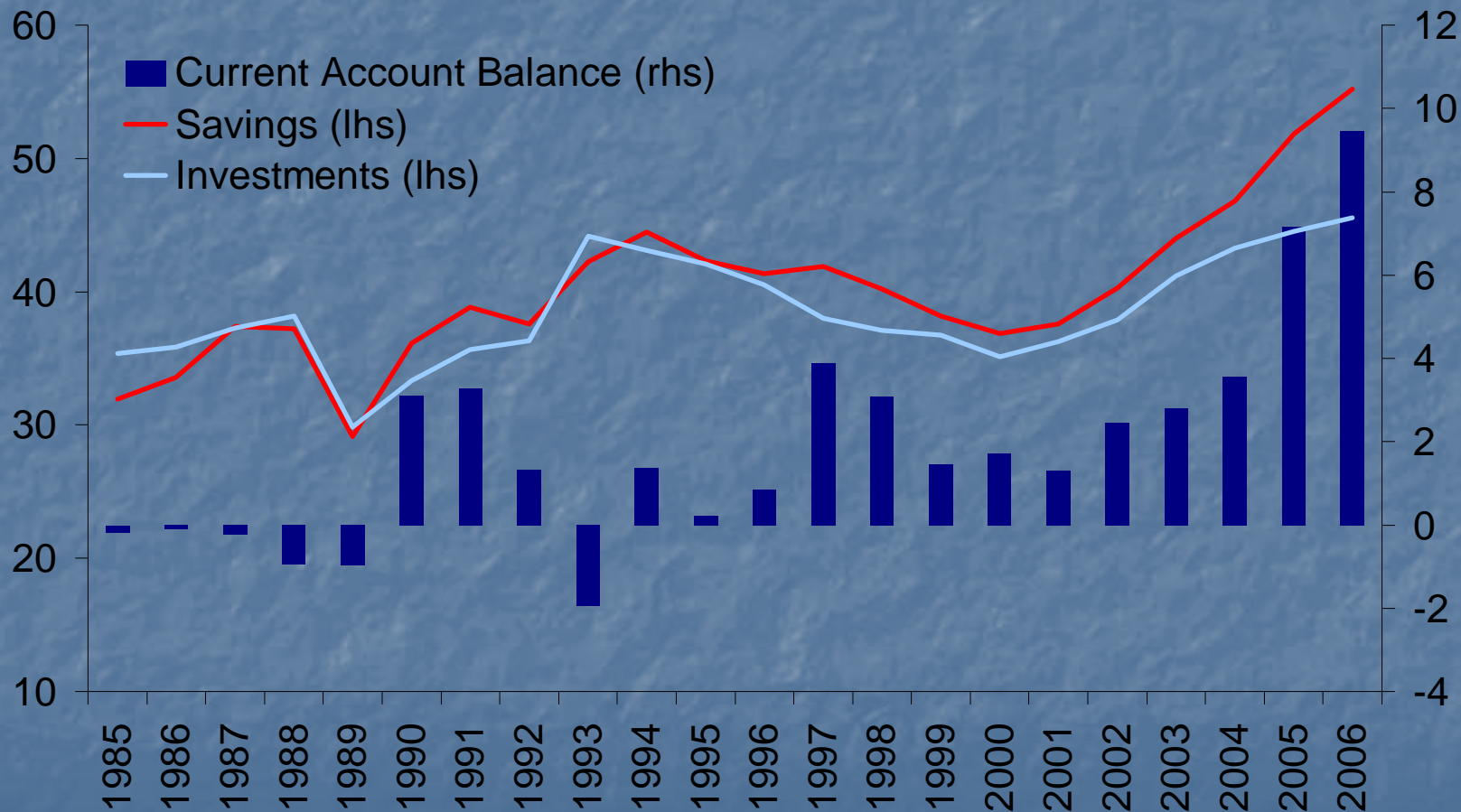
(In billions of U.S. dollars)



Source: IMF, WEO

In the past 5 years most excess savings have been accumulated China...

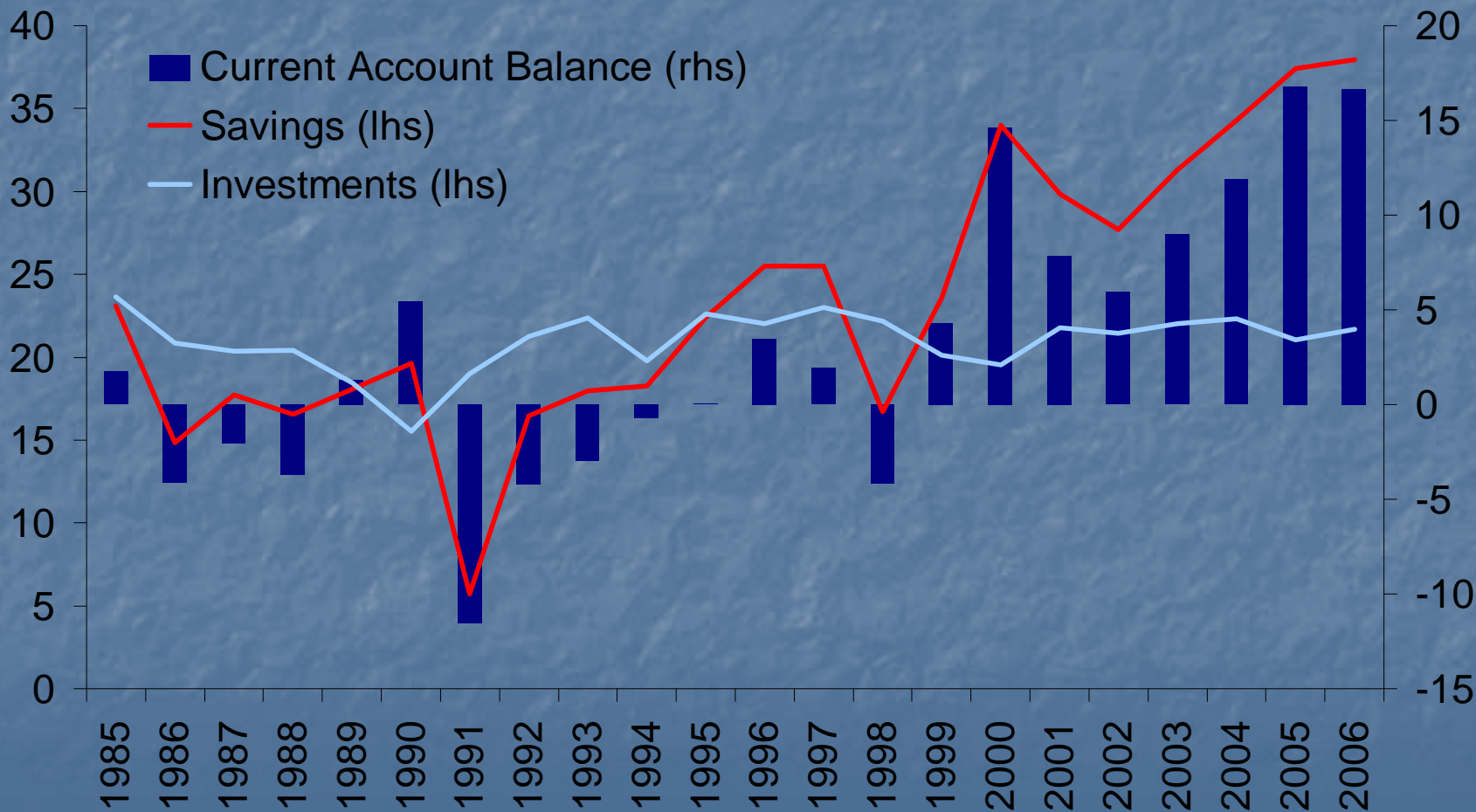
China
(In percent of GDP)



Source: IMF, WEO.

...and by oil-producing countries. Savings in oil-producing countries have expanded substantially, while investments have been largely unchanged

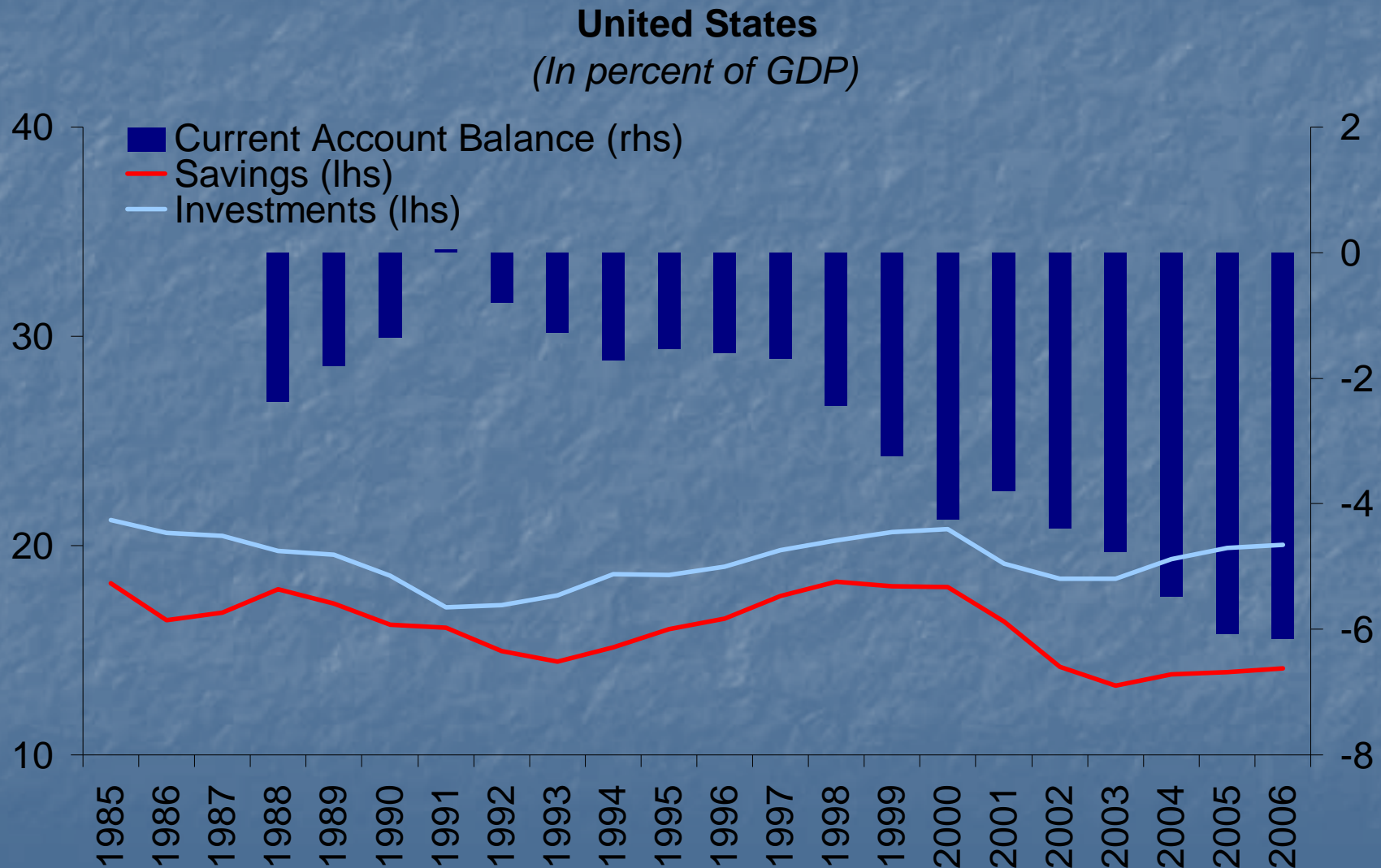
Oil-producing Countries* (In percent of GDP)



Source: IMF, WEO.

Note: Excluding Iran

Meanwhile the current account deficit of the U.S. has expanded substantially since the early 1990s



Source: IMF, WEO.

Emerging Markets to Global Center Stage

EM Countries now account for:

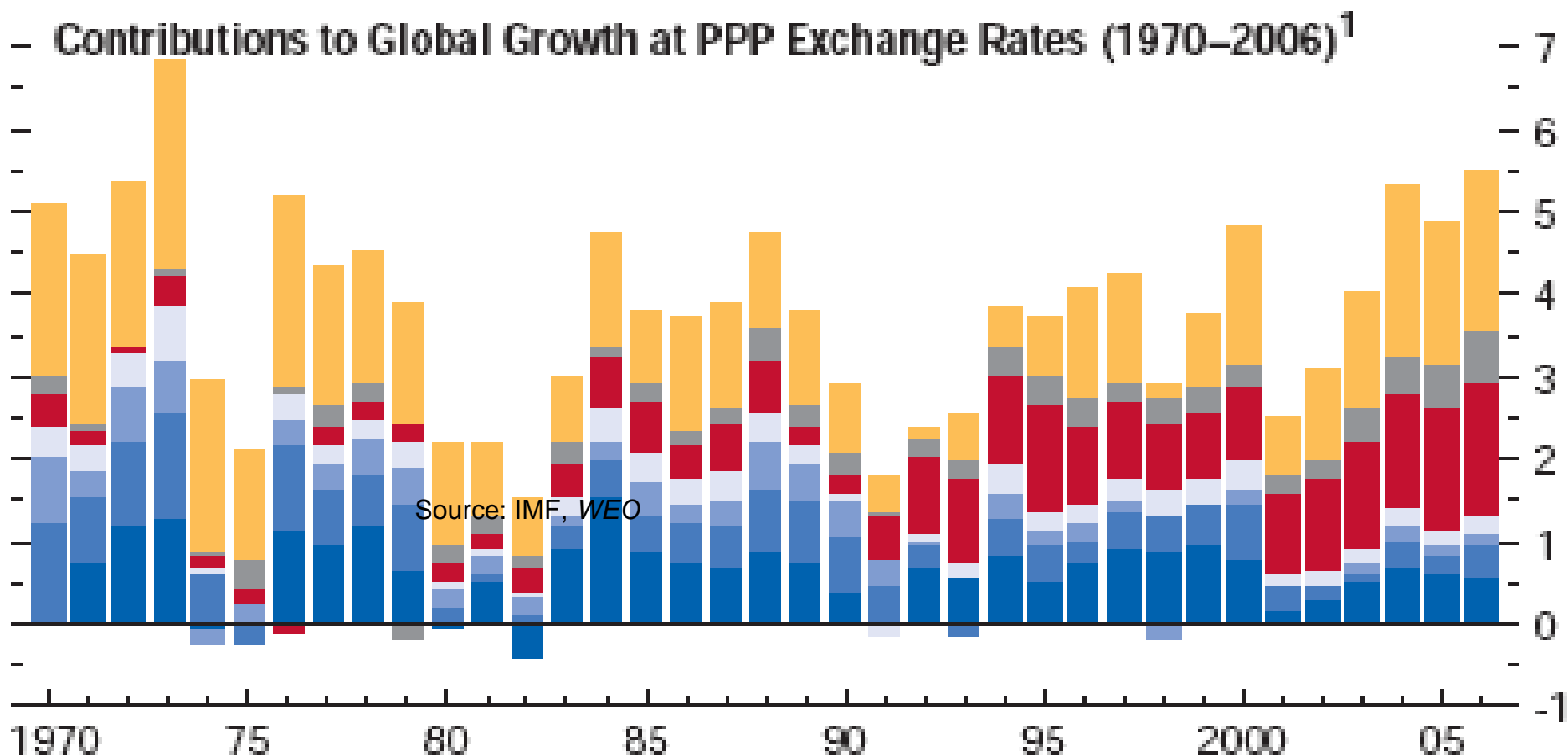
Half of global GDP

Majority of global growth

Majority of global trade

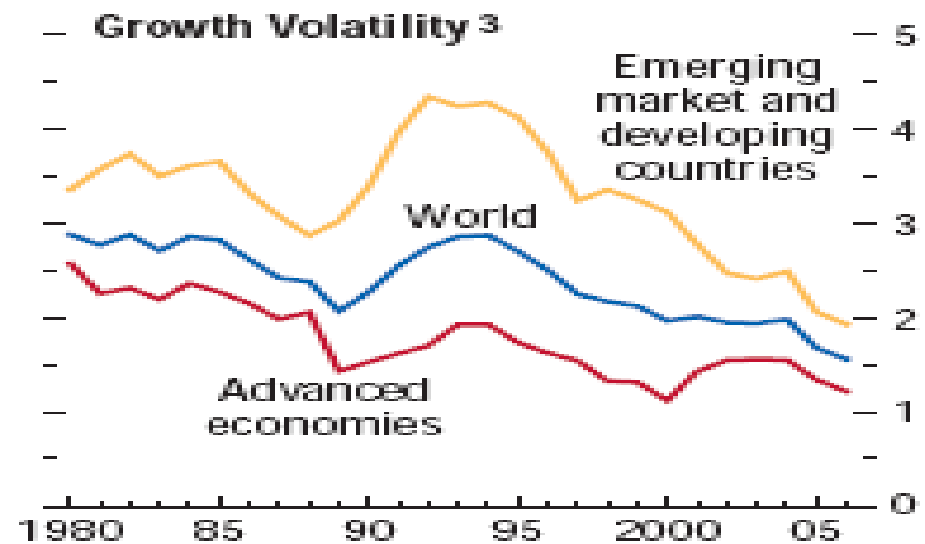
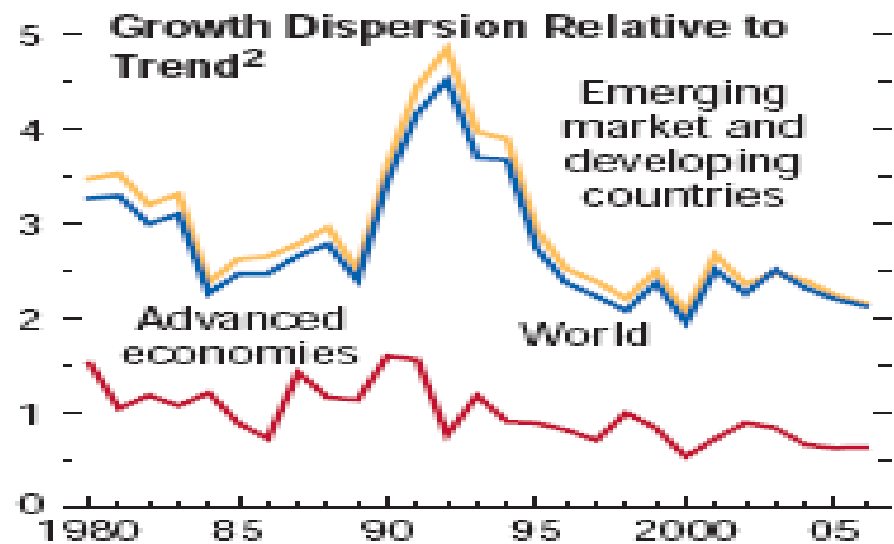
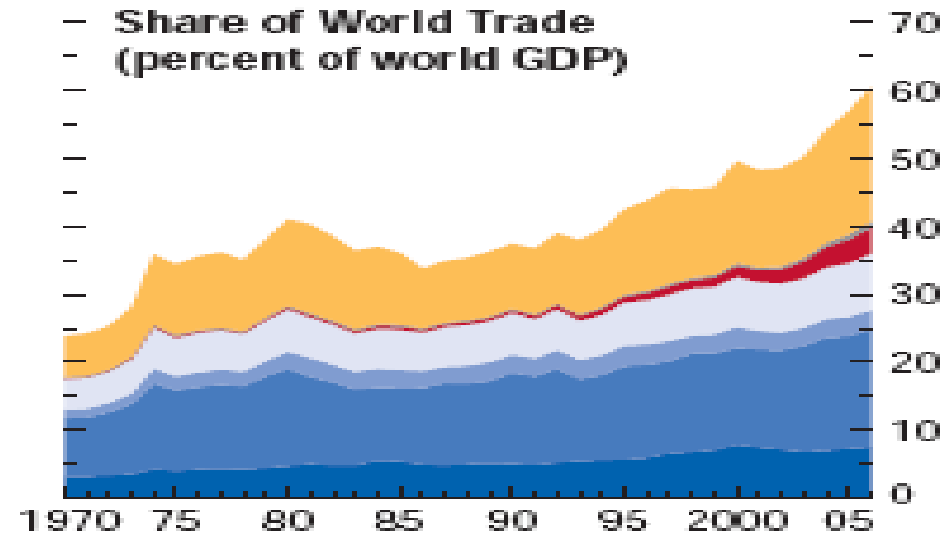
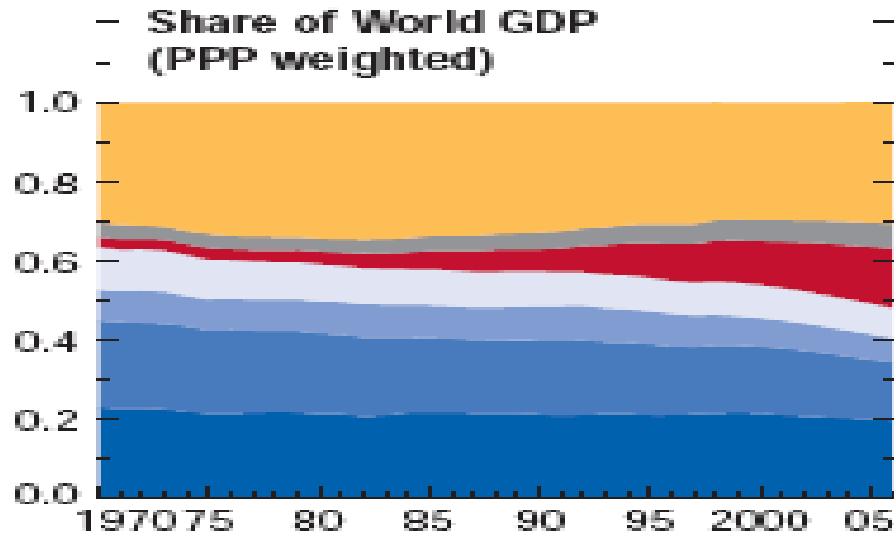
Majority of international reserve growth

EM countries have expanded their role in the world economy



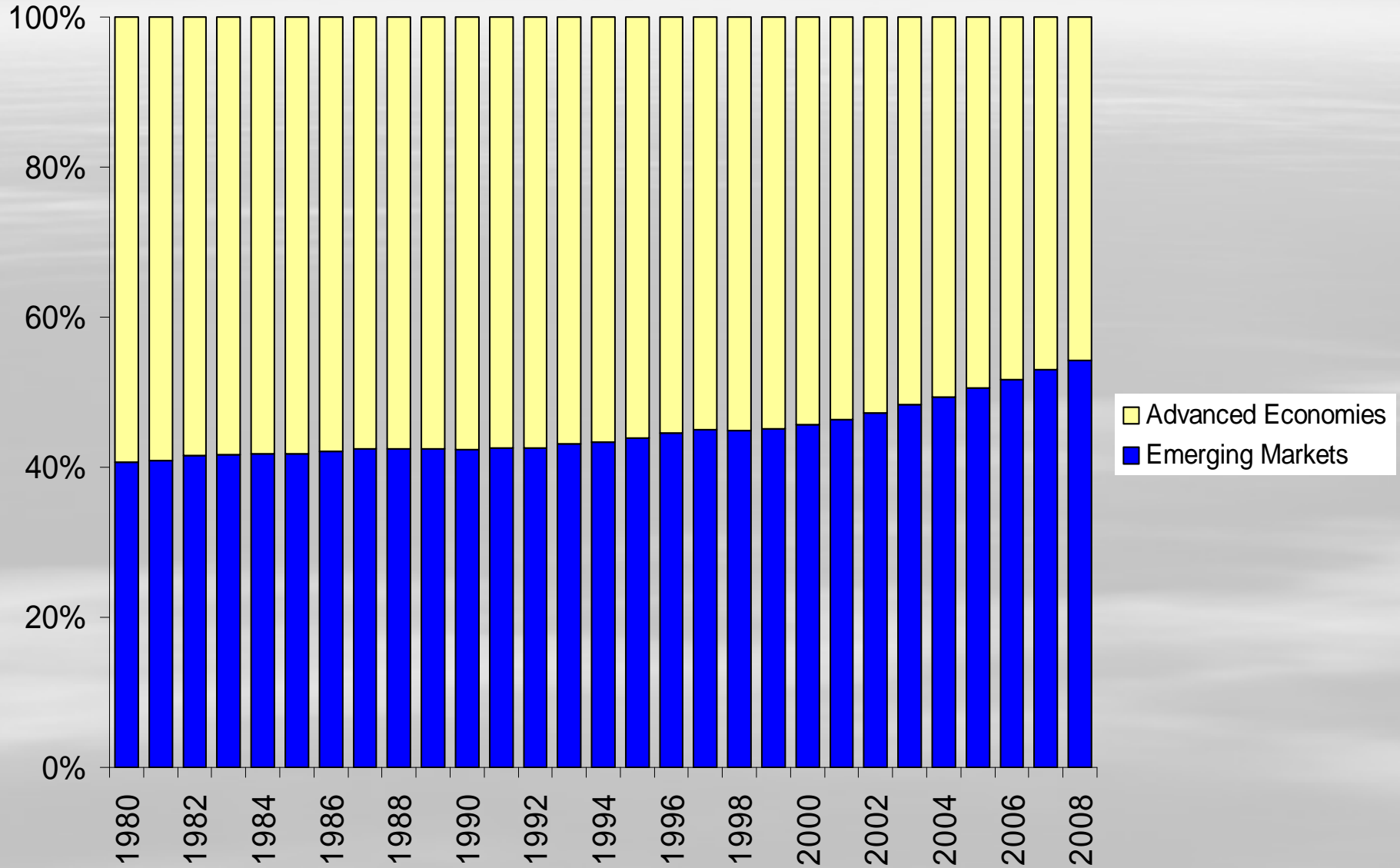
- United States
- Euro area
- Japan
- Other advanced economies

- China
- India
- Other emerging market and developing countries



GDP, based on PPP valuation of GDP

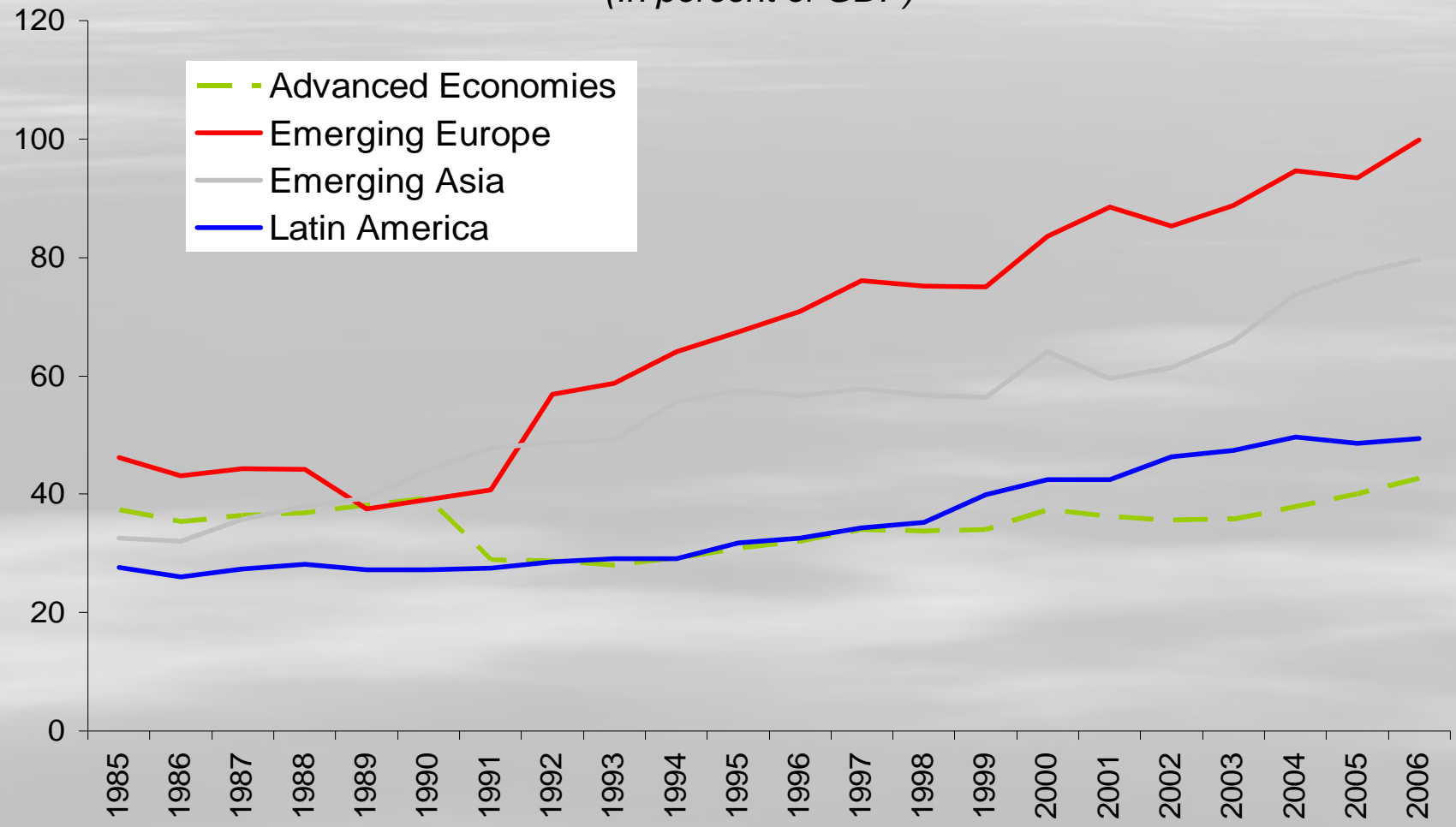
(In billions of current international dollars)



Source: IMF, WEO

EM economies play an increasingly important role in international trade

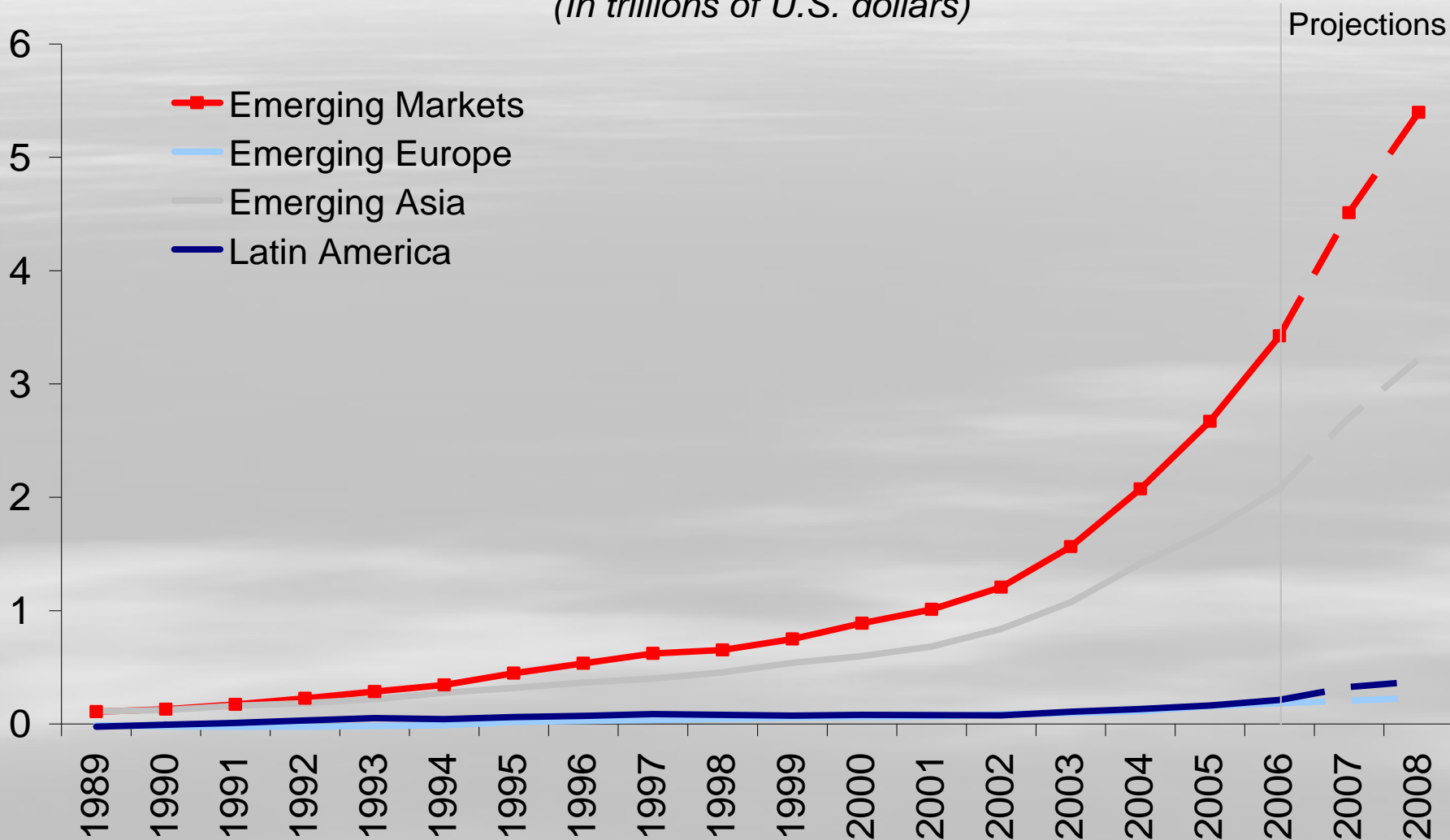
Trade Openness
(In percent of GDP)



Source: IMF, WEO.

Accumulation of foreign reserves in EM has been sizable and is expected to continue to rise substantially

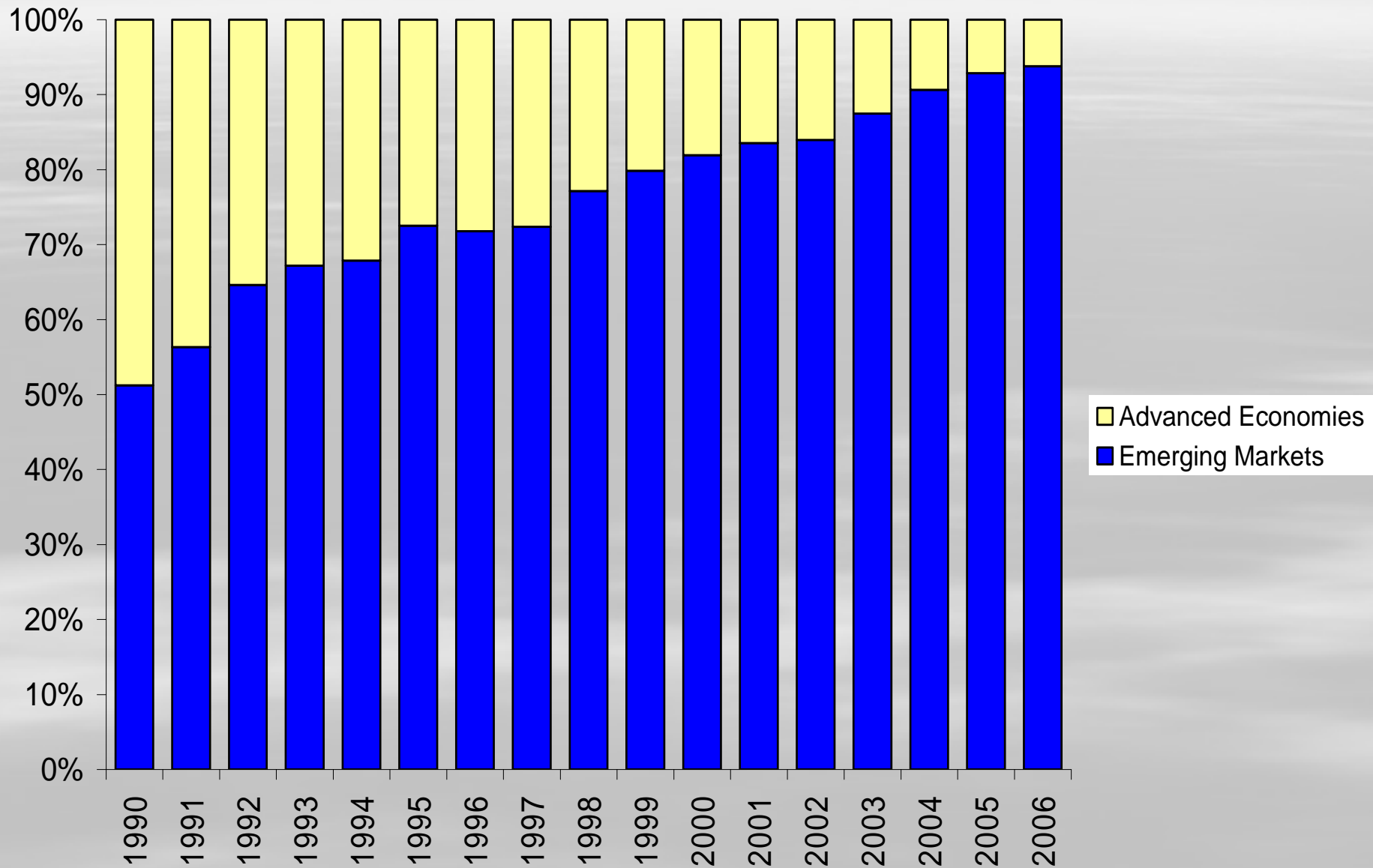
Reserves Accumulation, 1989-2008
(In trillions of U.S. dollars)



Source: IMF, WEO.

Accumulated Reserves

(In percent of total world reserves)



Source: IMF

Sovereign Wealth Funds

Size of sovereign wealth funds and factors driving growth

Asset allocation and investment strategy

Impact on global capital markets

Costs and benefits of sovereign wealth funds

Implications for investment decisions

Assets Under Management for SWFs

(As of February 2008--In billions of U.S. dollars)

Name of Fund, Assets, Range

I. Oil and Gas Exporting Countries

UAE Abu Dhabi Investment Authority 250 875

Norway Government Pension Fund-Global 380

Saudi Arabia 1/ 289

Kuwait Reserve Fund for the Future Generations 213

Government Reserve Fund

Russia Reserve Fund 125

National Welfare Fund 32

Libya Libyan Investment Corporation 50

Qatar State Reserve Fund/Stabilization fund 30

Algeria Reserve Fund/Revenue Regulation Fund 43

USA (Alaska) Alaska Permanent Reserve Fund 40

Brunei Brunei Investment Authority 30

Assets Under Management for SWFs

(As of February 2008--In billions of U.S. dollars)

Name of Fund, Assets, Range

I. Oil and Gas Exporting Countries (continued)

Kazakhstan National Fund 21

Malaysia Khazanah Nasional BHD 19

Canada Alberta Heritage Savings Trust Fund 16

Nigeria Excess Crude Account 11

Iran Oil Stabilization Fund 9

Azerbaijan State Oil Fund 2.5

Oman State General Reserve Fund 2

Timor-Leste Petroleum Fund of Timor-Leste 1.4

Venezuela FIEM - Macroeconomic Stabilization Fund 0.8

Trinidad & Tobago Revenue Stabilization Fund 0.5

Assets Under Management for SWFs

(As of February 2008--In billions of U.S. dollars)

Name of Fund, Assets, Range

Continued

II. Asian Exporters

Singapore Government Investment Corp. 100 330

China China Investment Corporation 200

Singapore Temasek Holdings 108

Korea Korea Investment Corp. 30

Taiwan, Province of China National Stabilization Fund 15

III. Other Countries

Australia Future Fund 54

Chile Economic and Social Stabilization Fund 14.9

Pension Reserve Fund 1.5

Botswana 1/ Pula Fund 4.7

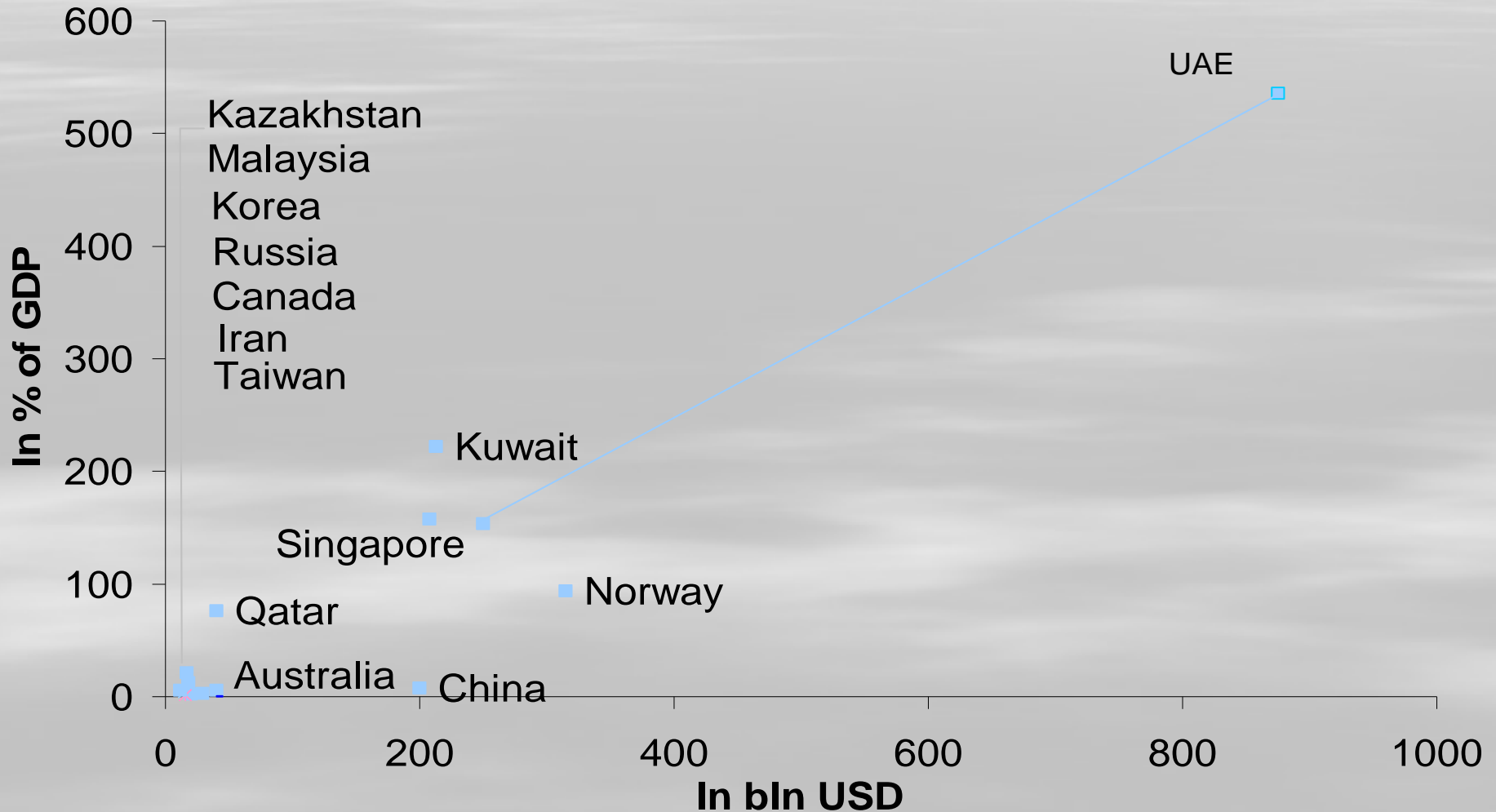
Kiribati Revenue Equalization Fund 0.4

Sources: IMF (Deutsche Bank; Morgan Stanley; news articles; Peterson IIE; PIMCO; and SWF websites)

1/ Part of the investment tranches of these countries' central banks.

Sovereign Wealth Funds Have Grown Significantly

Size of Sovereign Wealth Funds



Source: Merrill Lynch and IMF, WEO.

There Is a Mounting Pressure to Limit Further Accumulation of Central Bank Reserves With a Resulting Expansion of Sovereign Wealth Funds

Factors Driving Growth of Sovereign Wealth Funds

International reserves have reached levels well beyond those needed for external vulnerabilities

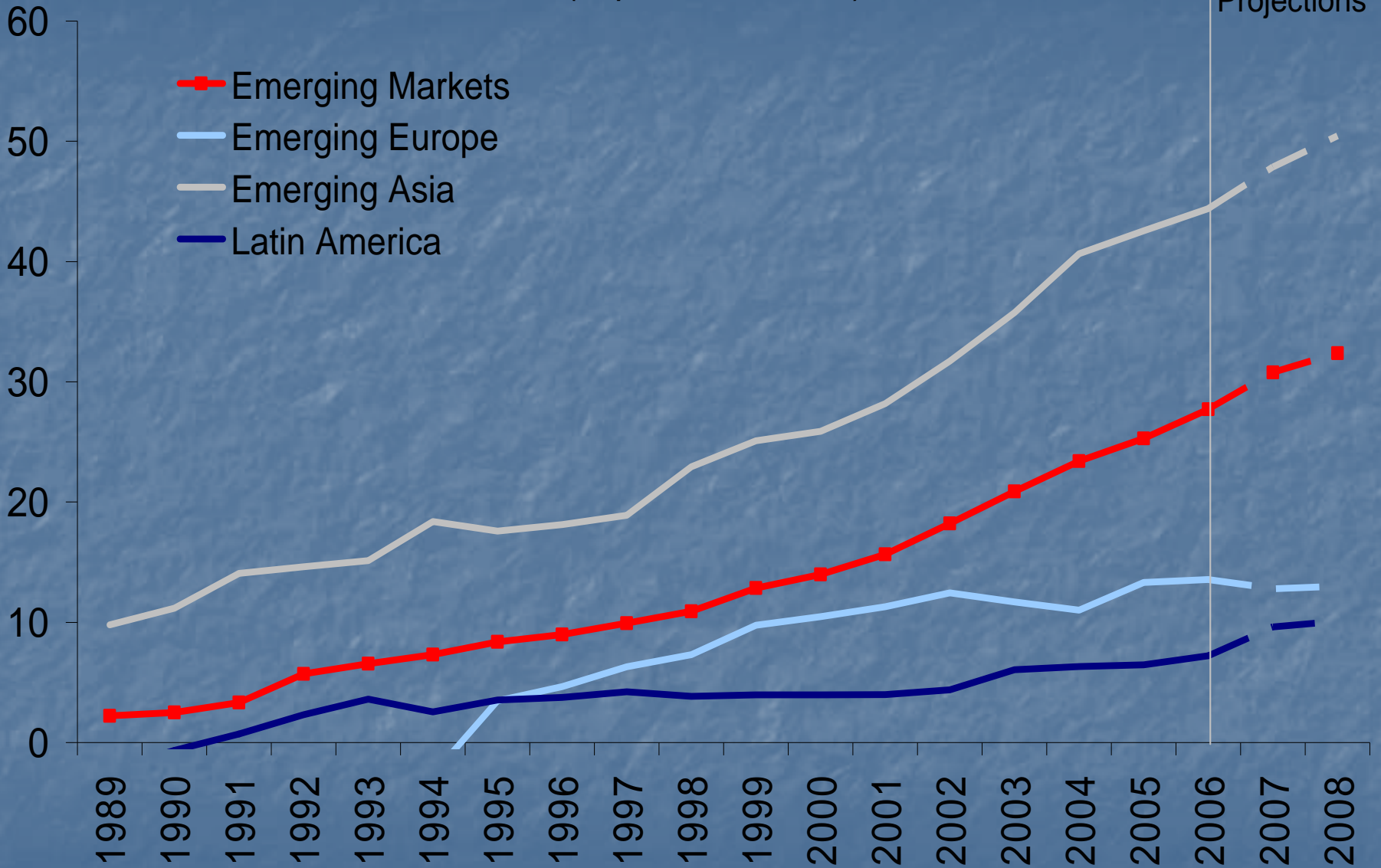
Reserve accumulation must be sterilized to be non-inflationary; Domestic cost of sterilization greater than return on central bank investments

Central bank has choice of reserve accumulation/costly sterilization or exchange rate appreciation

SWF do not face same investment restrictions as central banks

Growth of SWF also driven by need to insulate economy from volatile commodity prices, share wealth across generations and fund priority projects

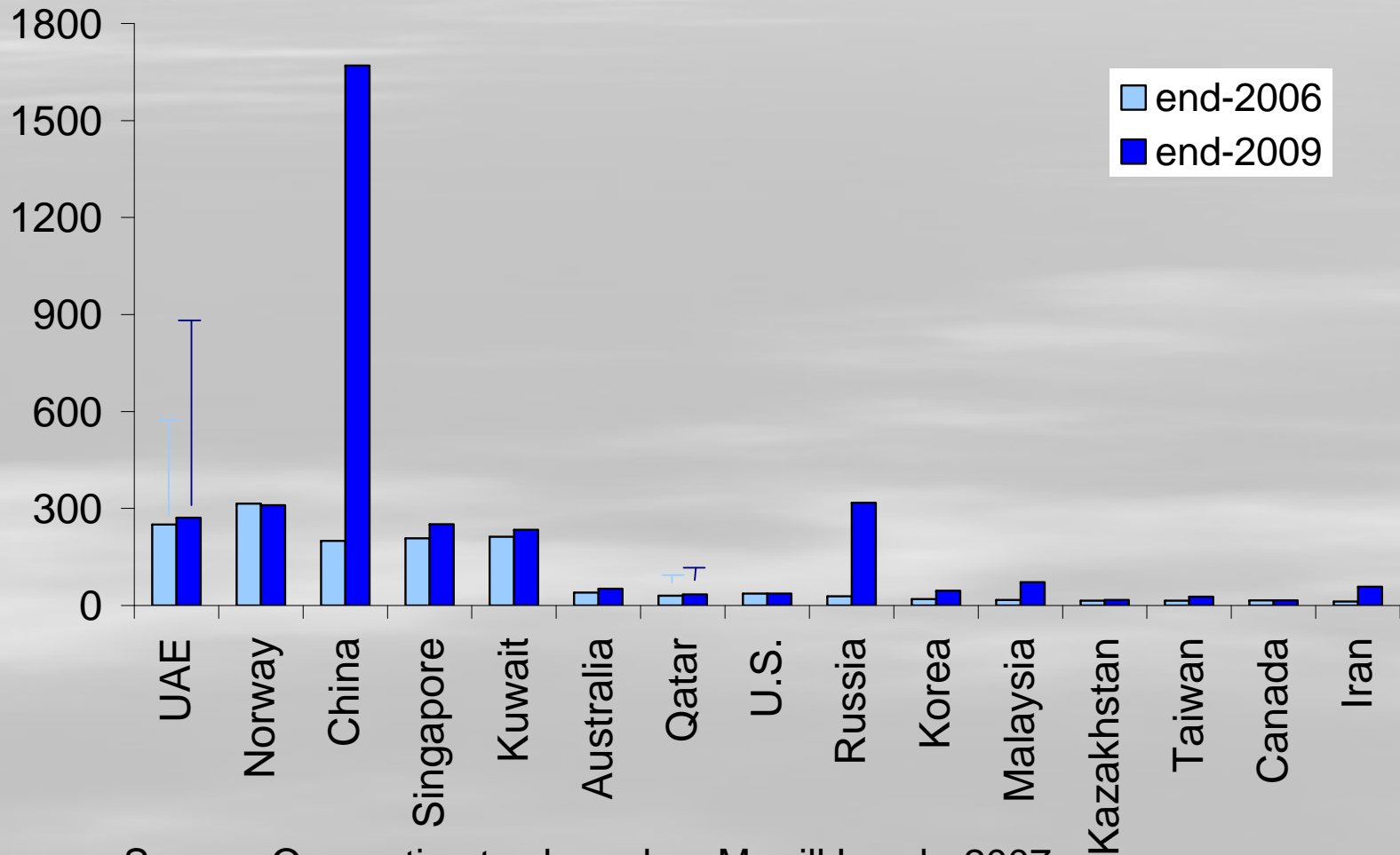
Reserves Accumulation, since 1980 (In percent of GDP)



Source: IMF, WEO.

Additional reserve accumulation mainly allocated to sovereign wealth funds

Estimated Size of Sovereign Wealth Funds by end-2009



Source: Own estimates based on Merrill Lynch, 2007

Sovereign Wealth Fund Timeline

Russia	Savings Fund for Future Generations	Natural Resources	2008 exp.
Chile	Pension Reserve Fund		2008 exp.
Libya	Libya Investment Authority	Natural Resources	2007
China	China Investment Corporation		2007
Trinidad and Tobago	Heritage and Reserve Stabilization Fund	Natural Resources	2007
Australia	Future Fund	Fiscal Surplus	2006
Chile	Economic and Social Stabilization Fund	Natural Resources	2006
Mauritania	National Fund for Hydrocarbon Revenues	Natural Resources	2006
Korea	Korea Investment Corporation		2005
Qatar	Qatar Investment Authority	Natural Resources	2005
Timor-Leste	Investment Fund	Natural Resources	2005
Venezuela	National Development Fund (PDVSA)	Natural Resource	2005
Sao Tome and Principe	National Oil Account	National Resources	2004
Russia	Oil Stabilization Fund	Natural Resources	2004
UAE-Dubai	Isithmar	Natural Resources	2003
UAE-Abu Dhabi	Mubadala Development Company	Natural Resources	2002
Sudan	Oil Revenue Stabilization Account	National Resources	2002
New Zealand	Superannuation Fund	Fiscal Surpluses	2001

Source: Eliot Kalter, Center for Emerging Market Enterprises at the Fletcher School (based on information from the IMF, Peterson Institute and RGE Monitor).

Algeria	Revenue Regulation Fund	Natural Resources	2000
Azerbaijan	State Oil Fund	Natural Resource	2000
Mexico	Oil Income Stabilization Fund	Natural Resources	2000
Kazakhstan	National Oil Stabilization Fund	Natural Resource	2000
Iran	F/x Reserve Fund; Oil Stabilization Fund	Natural Resources	2000
Venezuela	Macroeconomic Stabilization Fund	Natural Resource	1998
Botswana	Pula Fund	Natural Resource	1997
Hong Kong	Exchange Fund		1997
Malaysia	Khazanah Nasional	Fiscal Surplus	1993
Norway	Government Pension Fund-Global/ Long term fund for future generations	Natural Resources	1990
Brunei	Brunei Investment Authority/General Reserve Fund	Natural Resources	1983
Singapore	Government Investment Corporation (GIC)	F/x Reserves	1981
Oman	State General Reserve Fund	Natural Resources	1980
Canada-Alberta	Alberta Heritage Savings Trust Fund	Natural Resources	1976
USA-Alaska	Alaska Permanent Reserve Fund	Natural Resources	1976
UAE-Abu Dhabi	Investment Authority (ADIA)	Natural Resources	1974
Singapore	Temasek Holdings	Fiscal Surplus	1974
Kiribati	Revenue Equalization Reserve Fund		1956
Kuwait	Kuwait Investment Authority (KIA)	Natural Resources	1953

Source: Eliot Kalter, Center for Emerging Market Enterprises at the Fletcher School (based on information from the IMF, Peterson Institute and RGE Monitor).

Sovereign Wealth Funds

Rapidly Shifting Asset Allocations

EM countries transforming to powerful investors with varying structure, transparency and accountability

Global asset allocation is shifting rapidly

While there are regional differences, SWF share longer time horizons and higher risk/return appetites

Increasing allocations to private equity, real estate, alternative investments

Increasing allocations to EM countries, including to meet public policy objectives

Types of Funds Based on Dominant Objectives

Conservative investment style; more fixed income focused than others

- *Stabilization funds*: natural resource exporting countries to insulate the economy from volatile commodity prices
- *Reserve investment corporations*: established to reduce the negative cost-of-carry of holding reserves or to pursue investment policies

Invest in a diversified portfolio of international assets to provide for long-term objectives, outsourcing to external managers. As assets grow in these funds and time horizons increase, investments may go to private equity

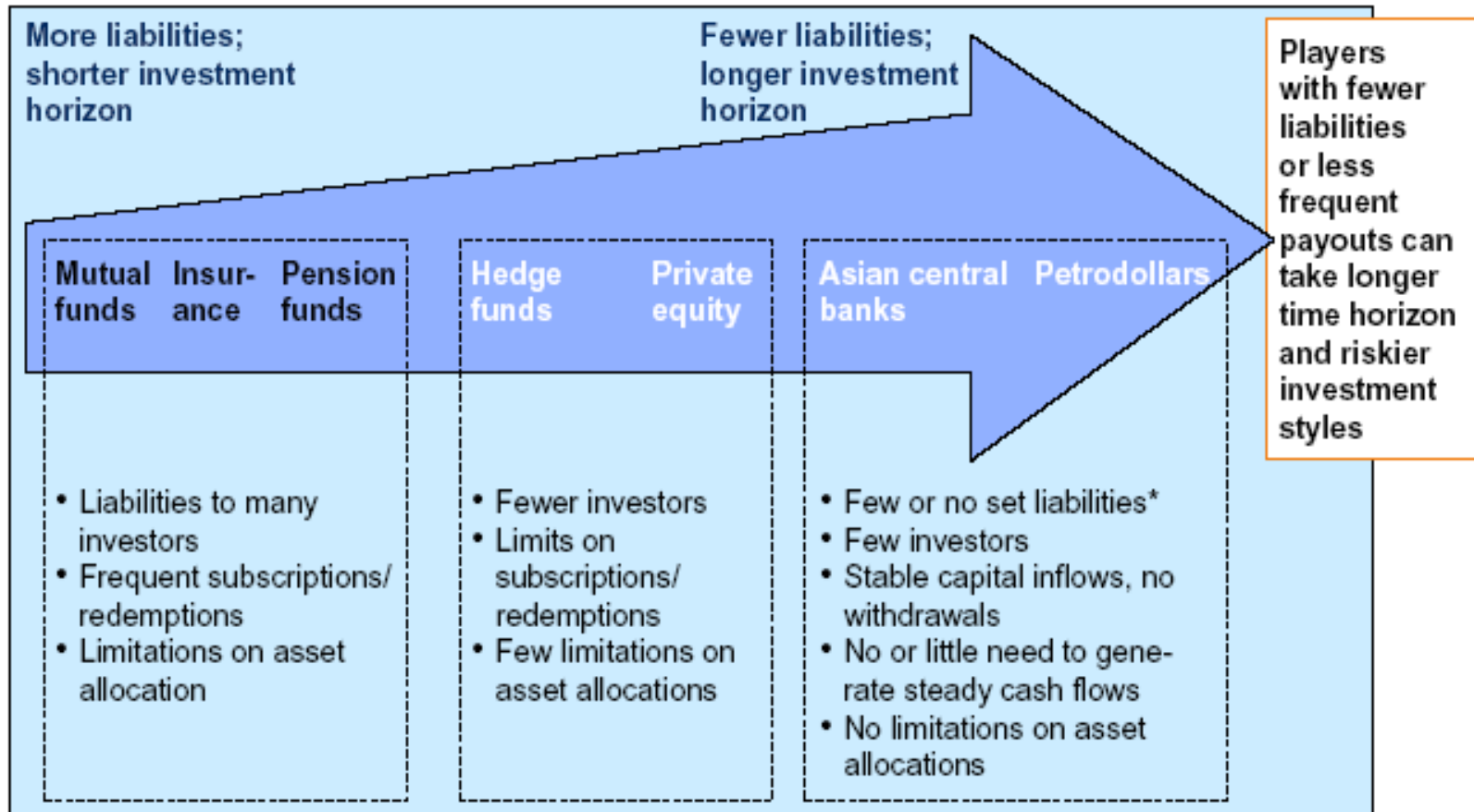
- *Savings funds*: while newer oil funds predominantly focus on stabilization objectives, the recent increase in oil prices has added emphasis to savings objectives, intended to share wealth across generations
- *Development funds*: allocate resources for funding priority socioeconomic projects, such as infrastructure
- *Pension reserve funds*: identified pension and/or contingent-type liabilities on the government's balance sheet

Asset Allocation

Sovereign Wealth Funds Have Fewer Investment Limitations

NEW PARTICIPANTS HAVE LONGER-TERM INVESTMENT PERSPECTIVE, ENABLING HIGHER-RISK STRATEGIES

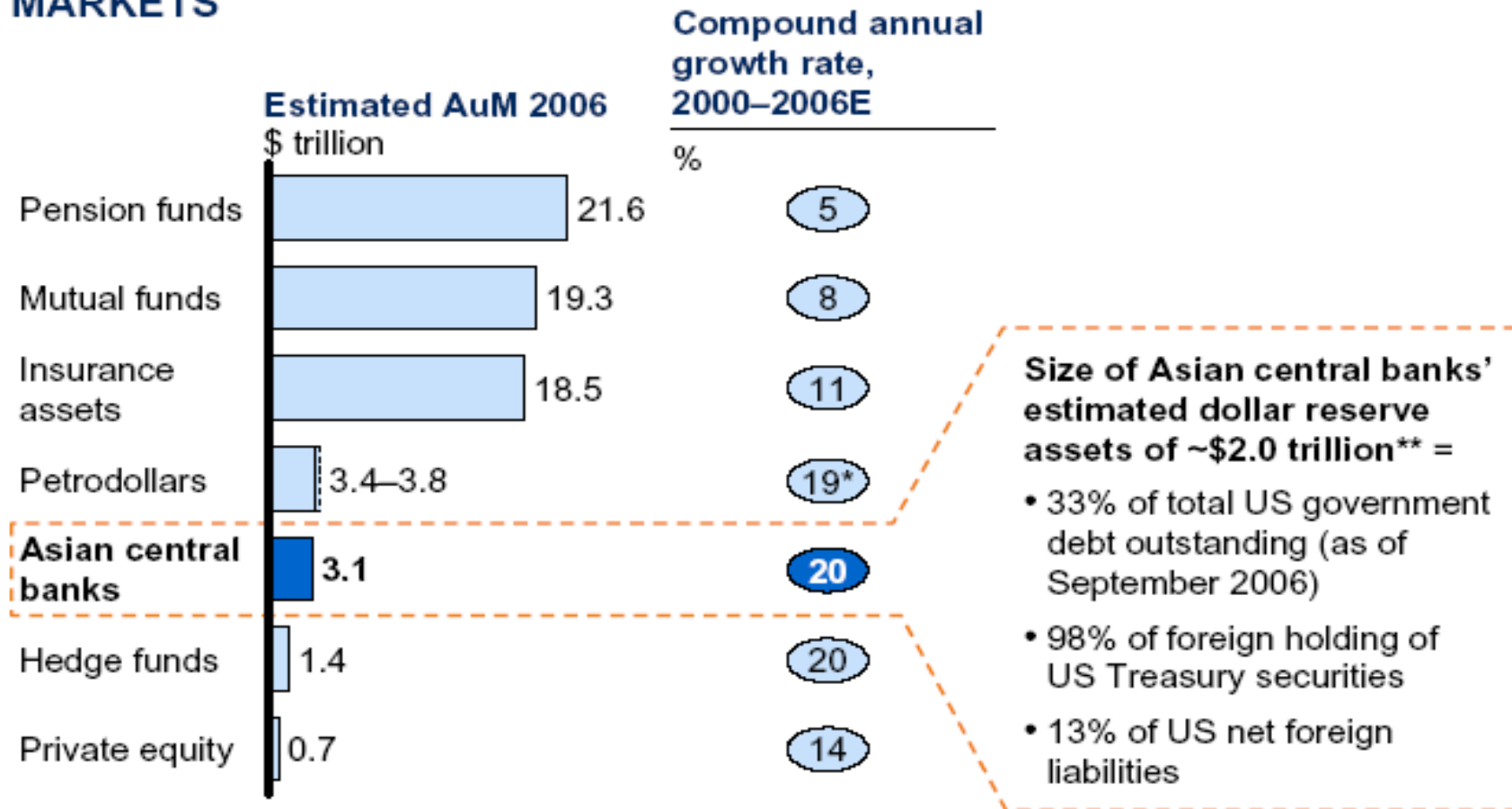
Potential investment horizon of different players



* Although Asian central banks are required to hold some portion of their assets in risk-free securities.

Asset allocation by region: Asian central banks

ASIAN CENTRAL BANKS ARE HUGE PLAYERS IN GLOBAL CAPITAL MARKETS



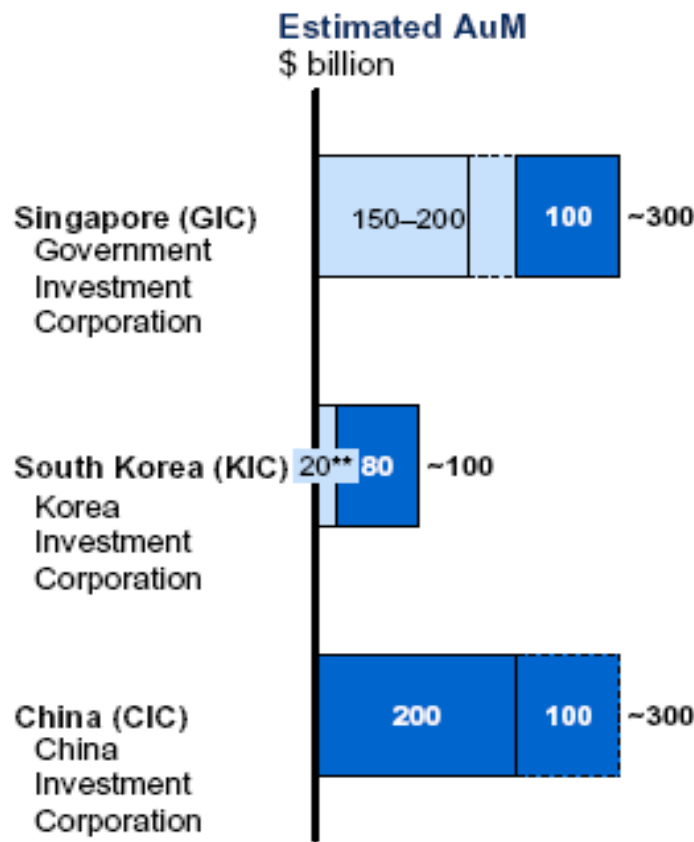
* Growth rate calculation based on data reported to the International Monetary Fund (\$2.5 trillion in 2006E, does not include UAE, Qatar).

** Based on share of dollars in global reserve holdings, as reported to the COFER database at the International Monetary Fund.

Asset allocation by region: Shift by Asian Governments

ASIAN GOVERNMENTS PLAN TO SHIFT UP TO \$480 BILLION INTO SOVEREIGN WEALTH FUNDS

Current funds in SWFs*
 Additional funds shifted to SWFs*



Key points

- Established in 1981
 - \$25 billion is managed by external fund managers
 - Diversified portfolio of overseas equities, bonds, and property, but with focus on commercial property
 - Reported annual real return of 5.3% since creation in 1981
-
- Established in 2005. Aims to grow to \$100 billion AuM by 2012
 - Target portfolio is 70% bonds and 30% equity
 - The agency "aims for returns equivalent to the avg. inflation rate of the G3" (United States, Japan, Germany)
 - KIC hired Barclays Global Investors and State Street Global Advisors as external asset managers
-
- It is expected that CIC will invest a significant part of its funds into equity and other riskier asset classes
 - A fraction of the portfolio likely will be handed over to outside managers

* Sovereign wealth funds, or government investment funds.

** Only \$1 billion out of the entire \$20 billion is currently fully invested; the government intends to invest the full \$20 billion by the beginning of 2008.

China Investment Corp

Sovereign Wealth Fund Asset Allocation Strategy

CIC has an initial \$200 billion to invest from Chinese government, out of \$1.4 trillion central bank reserves

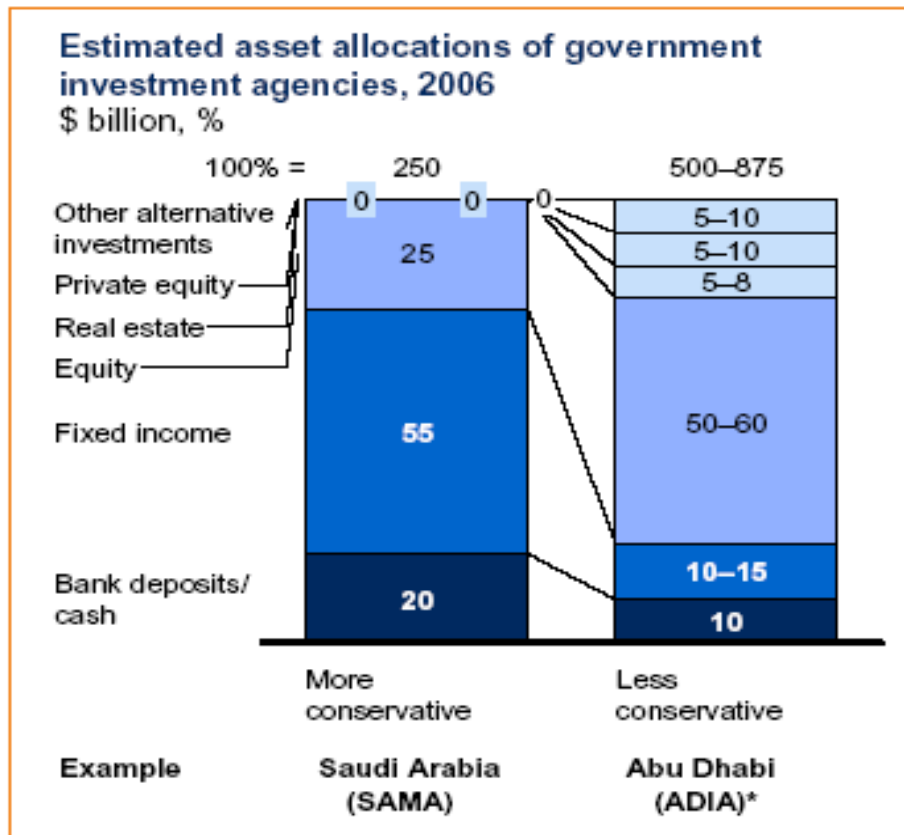
Goal to achieve long-term investment returns with acceptable risk

Two-thirds of funds will be invested domestically to purchase central Huijin (which controls major state-owned commercial banks) and replenish capital of agricultural and development banks

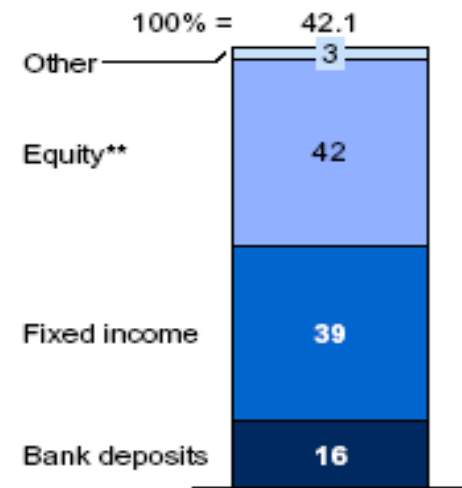
One-third will be invested abroad, in equity and fixed income markets (including U.S. Treasuries, private equity and hedge funds). The CIC will aim for investments in financial institutions and avoid investments in airlines, telecommunications and oil. Private equity investment will be in minority stakes to reduce political backlash

Asset Allocation by Region: Gulf States

MOST GULF GOVERNMENT INVESTMENT IS WEIGHTED TOWARD EQUITY, FDI, AND REAL ESTATE



Estimated asset allocation of US retail investors, 2006
\$ trillion, %



* The Abu Dhabi Investment Council was recently separated from ADIA and was given all the direct corporate holdings of ADIA. Most of these are investments in local companies.

** Includes equity in noncorporate business. We assume mutual funds have 50% equity share, pension funds 20%, and life insurance companies 10%.

Impact of Sovereign Wealth Funds on Global Markets by 2009

Impact of sovereign wealth funds on global markets will increase substantially in future:

EM international reserves are projected to increase by \$2.5 - \$3 trillion

SWF assets likely to grow by similar amount to a total of \$4 trillion

Greater proportion of SWF investments will go to direct investment and smaller amount to fixed income

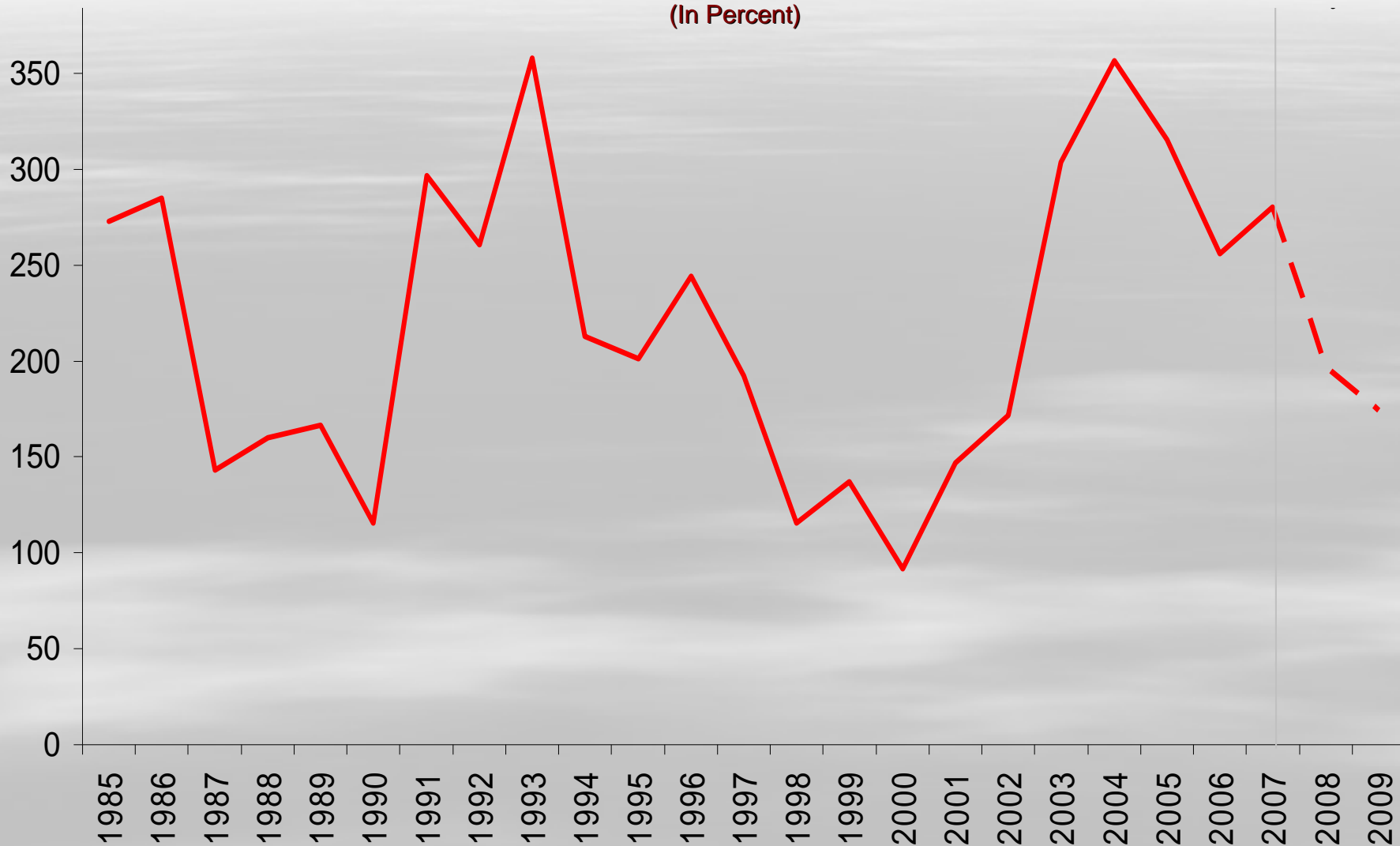
Proportion of SWF investments in dollar assets may decline

Impact of increased importance of SWF investments: reduced equity risk premiums and increased mature market bond yields

Increased holdings by sovereign wealth funds mean greater flows to direct investment and less to fixed income

Portfolio to FDI Flows

(In Percent)



Source: own estimates based on IMF, WEO.

Benefits of Sovereign Wealth Funds

Meets SWF country objectives noted above

Prudent accumulation of assets in higher return space

Wide access to financial experts and international best practices

Augments global direct investment capital flows, raising efficiency and productivity

Long-term investors, not leveraged and without capital requirements, thereby countering global liquidity pressures

Risks of Sovereign Wealth Funds

Potential lack of transparency, accountability and regulation can cause risks to domestic and global financial market stability

Investments could be used to gain commercial or political advantage

Pricing of risk/return can be affected by information inefficiencies or unique SWF structure/characteristics

Could encourage financial protectionism and retaliation

Could cloud investors appropriate regional or asset allocation weighting

Mitigating Risks of Sovereign Wealth Funds

Governance, Accountability and Risk Management Issues

G7 wants OECD, IMF to take lead for drawing up code of conduct to 'enforce' transparency, accountability, risk management

The Communiqué of the International Monetary and Financial Committee issued in October, 2007 called on the IMF to engage in a dialogue with countries on identifying sound practice in the management of SWFs

IMF Managing Director Dominique Strauss-Kahn has emphasized:

- An agreement on best practices could help maintain an open global financial system
- The importance of a candid and continuing dialogue with countries to better understand concerns and constraints

Sovereign Wealth Funds

Implications for Investment Decisions

Unfair competition or input to investment strategy of institutional investors?

Institutional investors need to understand investment trends and strategies of sovereign wealth funds

- Impact on macro/financial environment
- Impact on risk/return across asset classes

Emphasis on access to information about SWF shifting allocation strategies

Sovereign Wealth Funds

Implications for Investment Decisions

(Continued)

Unfair competition or input to investment strategy of institutional investors?

Increased importance of regional managers to offset information gaps

Positive impact on return/risk of global private equity and negative impact on long-term global fixed income investments

Positive impact on EM equities and fixed income

EM currencies with SWF to appreciate sharply over the medium-term